Government of Bombay

Report

on the

Working of the Development Department

For the year ending 31st March 1927

1926-27 & 1928-29

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BOMBAY
PRINTED AT THE GOVERNMENT CENTRAL PRESS
1927

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INTRODUCTION

The annual report on the working of the Department was formerly compiled by the Director of Development, Bombay, who was the executive head of the whole Department. As the post of Director of Development was abolished in January 1927 and as there is not now a single executive head to compile the report, the annual report for the year 1926-27 has been divided into three parts thus :—

(*1*) *Part I.—The Back Bay Reclamation Scheme*—submitted by the Chief Engineer, Back Bay Reclamation Scheme, with the report from the Chairman of the Sanitary Committee appointed in connection with the scheme.

(*2*) *Part II.—The Industrial Housing Scheme*—submitted by the Land Manager, Development Department.

(*3*) *Part III.—The Suburban Schemes*—submitted by the Commissioner, Bombay Suburban Division.

2. During the year under report Sir Lawless Hepper was permitted by Government to relinquish the appointment of Director of Development on 30th November 1926, and to proceed on leave preparatory to retirement. The leave expired on 6th January 1927, from which date the appointment of Director of Development was abolished. As a temporary arrangement, Mr. K. S. Framji, C.I.E., B.A., L.C.E., F.U.B., who retired from the appointment of Chief Engineer and Joint Secretary to Government, Public Works Department, from the 2nd December 1926, was appointed to be Joint Secretary to Government, Development Department, and Chief Engineer, Back Bay Reclamation Scheme, with effect from the same date, until the termination of the agreement of Mr. H. A. Elgee, whom he then succeeded as Chief Engineer of the Back Bay Reclamation Scheme.

3. The separate engineering division for the Industrial Housing Scheme was amalgamated with the Suburban Division and the engineering work in connection with the Industrial Housing Scheme and Suburban Schemes was transferred to the Public Works Department under the Superintending Engineer, Northern Circle. No important new works were carried out in the Industrial Housing Scheme. The management of the Development Department chawls and the work in connection with town planning schemes and the disposal of lands in the

suburban schemes remained under the control of the Land Manager, Development Department.

4. The subject of the cooly camp at Colaba, mentioned in paragraph 9 of the report from the Sanitary Committee, published in part I, is under further discussion with that committee.

5. A list of the members of the Advisory Committees for the City of Bombay and Bombay Suburban Division for 1926-27 is given in appendix I. During the year these committees sat jointly with one additional member for a special investigation on the Industrial Housing Scheme. Their report was published at the close of the year under report.

R. D. BELL,

Secretary to the Government of Bombay,
Development Department.

APPENDIX I

Members of the Advisory Committees for the City of Bombay and the Bombay Suburban Division for 1926-27

Bombay City

1. Sir Lawless Hepper, Kt., J.P., Director* of Development (Chairman).

	Name of member	*Constituency*
2.	Sir Vasantrao Dabholkar, Kt., C.B.E., *vice* Dr. Nadirshaw H. E. Sukhia (deceased).	Municipal Corporation for the City of Bombay.
3.	Fazal Ibrahim Rahimtoola, Esq., B.A.	Municipal Corporation for the City of Bombay.
4.	R. H. A. Delves, Esq., F.S.I. ..	Chief Officer, Improvements Committee of the Board of Trustees for the Improvement of the City of Bombay.
5.	Major G. C. Richardson ..	Chamber of Commerce, Bombay.
6.	Jehangir Bomanji Petit, Esq., M.L.C.	Millowners' Association, Bombay.
7.	Manu Subedar, Esq. ..	Indian Merchants' Chamber.
8.	L. U. Mongini, Esq. ..	Bombay Presidency Trades' Association.
9.	W. H. Neilson, Esq., O.B.E. ..	Bombay Port Trust.
10.	Sitaram Keshav Bole, Esq., M.L.C.	Working Classes in Bombay.
11.	Joseph Baptista, Esq., L.C.E. (Bom.), B.A., LL.B. (Cant.), Bar.-at-Law, M.L.A.	Working Classes in Bombay.

Bombay Suburban Revenue Division

12.	Ig. D'Monte, Esq. ..	Bandra Municipality.
13.	D. D. Rodrigues, Esq. ..	Kurla Municipality.
14.	C. J. Hansoti, Esq. ..	Ghatkopar-Kirol Municipality.
15.	Janmejay Chhabildas, Esq., M.A. (Camb.)	Notified Area Committees.

Additional Member

16.	A. N. Surve, Esq. ..	Appointed as per Government Resolution No. S.D.—9, dated the 5th January 1925.

* Relinquished the appointment of the Director of Development on the 30th November 1926 and proceeded on leave preparatory to retirement.

PART I

BACK BAY RECLAMATION SCHEME

No. 1719.

OFFICE OF THE CHIEF ENGINEER,
BACK BAY RECLAMATION SCHEME.
Old Custom House Yard, Fort, Bombay,
Dated the 24th May 1927.

From

K. S. FRAMJI, Esq., C.I.E.,
Chief Engineer, Back Bay Reclamation Scheme;

To

THE SECRETARY TO THE GOVERNMENT OF BOMBAY,
Development Department.

Subject.—Annual report, 1926-27:
Back Bay Reclamation Scheme.

Sir,

During the year under report three committees were appointed to investigate and report on certain features of the Back Bay Reclamation Scheme. The first of the three committees, which consisted entirely of engineers, was appointed in April 1926 under the chairmanship of Mr. W. H. Neilson, Chairman of the Bombay Port Trust, to check and revise the estimates on which the conclusions of the Advisory Committee, which issued its report in January 1926, had, to a large extent, been based. The second committee, presided over by Mr. (Now Sir) Joseph Kay, was appointed in June 1926, the terms of reference being "Having reference to the financial position of the scheme, to consider and report to Government as to what, if any, further portion of the scheme can be undertaken with reasonable prospect of reducing the present loss and specially with reference to blocks 1 and 2."

2. In July 1926 the Government of India appointed a committee of enquiry, presided over by Sir Grimwood Mears, for the purpose of enquiring into the history of the inception and conduct of the Back Bay Reclamation Scheme and to make recommendations as regards future operations.

3. The reports of all these committees have been published and made public.

4. *Harbour dredging.*—Dredging operations in the harbour for the season 1925-26 ceased on the morning of the 13th May 1926, when the plant was laid up for the monsoon, during which all craft were overhauled and reconditioned. During this period also the pumping engines

of the intermediate pumping station "Colaba" were removed from the ship and the foundation for the same stiffened and a large number of defective rivets renewed. As a result of the blinding of the rubble mound under the sea wall and also sealing of the cross bunds with murum, thus making area 8 virtually a water-tight compartment, practically all of the material pumped into the area was retained and by the end of 1925-26 season it was found that the area had been filled with dredged material as high as it was possible to do so without raising the retaining banks on three sides well above the level of the original foreshore. After various discussions it was decided that it would not be advantageous to do this, as if pumping into this area 8 were resumed in season 1926-27, the whole area would again be flooded and the date of completion would be delayed another year, in order to allow time for the material to dry out. It was, therefore, arranged to carry the pipe line No. 1 into block No. 7, through No. 8, complete the latter by means of dry filling and pump into No. 7, this season of 1926-27.

5. The Kay Committee did not recommend the reclamation of block 7, *vide* paragraph 31 of its report. This was mainly on the ground that the reclamation and development of this area was not a paying proposition. Government, however, did not agree with or accept the recommendation, for, on reviewing the whole case it was found that the reclamation and development of this block would result in reducing the debt by a substantial amount. Government, therefore, decided that the reclamation of this block should be proceeded with. The reasons for arriving at this decision were fully set forth in a press note No. S.B.—1682, dated the 21st October 1926, which also gives figures showing the financial aspect of the question.

6. The dredger "Sir George Lloyd" was, therefore, moored in position outside Oyster rock for the new season's work on the 28th September 1926, after which the work of connecting up the floating pipe line was taken in hand. The intermediate pumping station "Colaba" was moored up in her berth for the new season's work on the 14th of October 1926, after which the floating pipe line was connected up to the shore and pumping operations were commenced on Monday morning, the 18th October 1926, pumping into block No. 7 through pipe line No. 1, working two shifts of 12 hours each per day. During the first week of dredging, heavy swells were experienced and these, breaking the check chains on the pontoons, caused some delays. This has proved that pumping operations could not have been commenced earlier without running the risk of serious damage to the pontoons. On the morning of Thursday 23rd December 1926 whilst the dredger "Sir George Lloyd" was working, the main pumping engines raced badly, seriously damaging the cylinders and other parts to such an extent as to render the vessel entirely unworkable. A subsequent enquiry into the accident revealed that the racing was apparently due to a choke in the suction and discharge pipes and the enquiry committee has stated that no blame can be attached to any one. The damage

was covered by insurance but liability has not yet been accepted by the insurance company. The matter is still under correspondence and Government are pressing the insurance company to accept liability at once.

7. A much better output was attained by the "Sir George Lloyd" this year than any previous year, the maximum output per pumping hour, for a period of a week, being 2,273 cubic yards. For two consecutive weeks the output exceeded 2,000 cubic yards per pumping hour. The average output per pumping hour for the ten weeks worked by the "Sir George Lloyd" this season was 1,556 cubic yards. This improvement is due to the following reasons, *viz.*, longer consecutive hours of working, softer materials dredged than in previous years, a slight speeding up of the cutter engines, increased experience of the Assistant Dredging Masters. The doubling of the rate of bonus on output may also have had a beneficial effect. Had the breakdown not occurred, block No. 7 would have been completed, so far as dredged filling was concerned, during the first week in February 1927.

8. In order to complete the pumped filling in block No. 7 during the season 1926-27 the dredger "Kalu" was brought round from Back Bay where she was pumping into block No. 1 and commenced pumping in the harbour in conjunction with the "Colaba" as an intermediate pumping station on Monday the 24th of January 1927.

The reasons which influenced the decision to remove the "Kalu" from the Back Bay and bring her round into the harbour to complete the dredging into block No. 7 were as follows :—

(1) If this block was left indefinitely or for a long period in its then half filled condition, it would have been a menace to the health of the public.

(2) If continued and completed in the same season, it could be drained and allowed to dry out so that the murum topping could be proceeded with after the monsoon of 1928; otherwise there would be a whole year's delay.

(3) If the filling was stopped and it was decided, at a later date, to complete the remainder by dredging, the material already deposited would again be disturbed and longer period would be required to allow it to dry out before topping can be proceeded with.

(4) To fill the remainder of the block by murum only, an additional quantity of 8,35,000 cubic yards of murum would have been required adding greatly to the cost of this block as dredging could be done for less than half the cost of dry filling.

(5) Lastly, pipe line No. 1, through which pumping into block No. 7 was being done, was rapidly falling into bad condition from wear and would probably have been unfit for use after the season of 1926-27, so the sooner it was made use of the better; otherwise a new pipe would have been necessary later on, the cost of which would have been heavy. This was practically the deciding factor.

9. The removal of "Kalu" from block No. 1 is not likely to set back the programme for that block, as it was expected its filling will be completed, if resumed in the season of 1927-28, by the end of that season, instead of earlier in the season. It makes little or no difference, as regards future operations of dry filling, whether the wet filling is completed at the end of the season or some time earlier.

10. The output of the "Kalu" is considerably lower than that of the "Sir George Lloyd" due principally to the fact that a big loss of power takes place owing to the propelling engine being situated in the stern, necessitating a long line of shafting to the top of the suction frame, with 5 sets of bevel wheels, thereby rendering the vessel unable to cut the clay at a sufficient speed to get a better output. The maximum output of the "Kalu" for a period of one week was 789 cubic yards per pumping hour and the average, upto the end of March 1927, was 713 cubic yards per pumping hour. The performance of the plant, dredging in the harbour from the commencement, is shown below :—

Season	Number of pumping hours worked	Quantity of material dredged as ascertained from soundings	
		Per season	Per pumping hour
"Sir George Lloyd"		Cubic yards	Cubic yards
1923-24	843	859,858	1,020
1924-25	1,473	1,261,986	856
1925-26	1,905	1,828,303	959
1926-27	918	1,429,406	1,557
"Kalu"			
1926-27	992	603,929	609

By the middle of May, the filling of block 7 with dredged material had been completed. As it has been decided not to reclaim block 6, dredging operations in the harbour will not now be resumed. Block 7 will be allowed to dry out till October 1928 when its completion with a murum topping will be undertaken.

11. *Dredging in Back Bay.*—Dredging operations in Back Bay for the season 1925-26 ceased on Thursday the 29th April 1926 when the plant was laid up for the monsoon, during which all the craft were overhauled and reconditioned. The dredger "Kalu" was taken round to Back Bay for the new season's work on Monday the 25th October 1926 but owing to big swells being experienced it was not possible to commence connecting up the floating pipe line the same week. This work was, however, commenced the following week and the "Kalu" commenced dredging on Wednesday the 10th November 1926. Owing to the breakdown of the "Sir George Lloyd" and the desirability of completing block No. 7 this season, it was decided to do this with the "Kalu".

She, therefore, ceased pumping in Back Bay on 11th January 1927. The output obtained this year is slightly lower than that of last year by .8 cubic yards per pumping hour. The maximum output per pumping hour for a period of one week being 583 cubic yards and the average for the period the dredger was working in Back Bay was 398 cubic yards per pumping hour. The performance of the plant, dredging in Back Bay from the commencement, is shown below :—

Season	Number of pumping hours worked	Quantity of material dredged as ascertained from soundings	
		Per season	Per pumping hour
"*Kalu*"		Cubic yards	Cubic yards
1924-25	111	15,640	141
1925-26	918	372,925	406
1926-27 (to 12th January 1927) ..	553	220,072	398

12. "*Jinga*"—The work of reconditioning this vessel has been completed and she is ready for work next season and would have been used in the present season if the "Kalu" had not been transferred to the harbour.

13. *Kandivlee quarry.*—The principal work during the year 1926-27 has been the supply of murum for topping block No. 8 and for sealing the rubble mound and forming a bund to retain the material pumped from the harbour in block 7.

Crushed stone, rubble and concrete blocks for storm water drains have been loaded up from stock as required for the work in Bombay.

All the 20 cubic yard side tipping wagons were thoroughly overhauled during the year, after 4 years running with only minor repairs. When the overhauling of the wagons was completed, and as there was insufficient work to keep the workshops running economically, they were closed down in September 1926 and some of the machines were transferred to Marine Lines section and erected in the workshops there, to be utilised for wagon repairs and other work.

In September 1926 it was decided to increase the output of murum from 2 rakes to 5 rakes a day. An additional area of about 31⅓ acres of land was acquired adjoining the quarry and the quarry sidings were extended to enable this area to be worked.

One hundred Bombay Development Department box type wagons were taken over from the Housing and Materials Division to enable 5 rakes to be worked.

Three rakes of 3,000 cubic yards of murum were loaded per working day from 1st November 1926, and since 8th January 1927 five rakes or 5,000 cubic yards per working day have been loaded.

14. *Dry filling.*—About 880,000 tons (or cubic yards) were brought in during the year and the costs of this material worked out to about Rs. 1·3 per cubic yard, which is more than that of wet filling, which has averaged to about 8 annas per cubic yard for the harbour dredging. Out of this quantity of dry filling brought in, 16,000 tons (cubic yards) were tipped along the inside of the sea wall in block 1 to seal the same and prevent the escape of the dredged fill and 164,600 tons (or cubic yards) were put along the sea wall and along the cross bund of block 7 for the same purpose. The balance of some 699,400 tons (or cubic yards) was put into block 8. This block measures about 1,240,600 square yards or 256 acres in extent and out of this area about 446,500 square yards or 92 acres of the dredged fill surface had been covered with murum and brought upto the finished level by the end of March 1927. An area of approximately 20 acres was levelled off by the middle of February 1927 in readiness to hand over to the military authorities in advance of the rest.

In addition to the dry filling, brought in by trains about 110,200 cubic yards of building rubbish, etc., were collected by motor lorries during the year and tipped into block 1 at a cost of about Re 0-10-2 per cubic yard. Upto the end of march 1927 an area of about 80,000 square yards had been filled by this method in this block.

15. *Storm-water drains.*—Of these No. 6, which forms the boundary between blocks 2 and 3 and No. 7, between blocks 1 and 2, were in hand during the year. No. 7 which has a length of 1,460 feet was completed, except for raising the walls of the manholes up-to the finished reclamation level. No. 6 is 2,310 feet long and is a work of some difficulty as, much of it being below sea level, work is only possible at low tide. A length of about 470 feet of it was done during the year in addition to 410 feet done before, so that 1,430 feet length has yet to be done.

16. *Other works.*—In addition to maintaining the sea wall, which passed satisfactorily through the monsoon of 1926, a rubble mound 2,440 feet long, 8 feet wide and 8 feet high was made across block 8 to carry the dredging pipe to block 7.

17. *Plant and machinery.*—Owing to the curtailment of the future programme and cessation of certain activities of the Department, some of the plant and machinery, which has become surplus, has been disposed of during the year under report through Messrs. Wm. Laws and Company, who have been appointed as selling agents for such plant, etc. Plant like grabs, cranes, oil engines, etc., have been sold and have realised good prices, in some cases up-to 50 and 75 per cent. of the original book value.

18. *Marine Lines and Colaba section.*—These two sections were combined on the 1st March 1926 under the charge of the Deputy Chief Engineer, Marine Lines. The Kandivli quarry section is also being closed and work in that section has been placed under the same officer.

No work has been done on the sea wall since the last report with the exception of minor repairs for slight damage to the rubble mound sustained during the monsoon.

I have the honour to be,
Sir,
Your most obedient servant,

K. S. FRAMJI,
Chief Engineer.

REPORT OF THE WORK DONE BY THE SANITARY COMMITTEE, DEVELOPMENT DEPARTMENT, FROM 1ST APRIL 1926 TO 31ST MARCH 1927

During the year 12 meetings of the Committee were held at the Back Bay House and the reclamation works were inspected on each occasion with the Chief Engineer and the Sanitary and Medical Officer.

2. Lieut.-Colonel W. M. Houston, M.B., Ch.B., D.P.H., I.M.S., Port Health Officer, continued as acting Chairman in place of Lieut.-Colonel F. P. Mackie, O.B.E., M.D., M.Sc., F.R.C.P., F.R.C.S., I.M.S., on leave. He resigned on his proceeding to England on 1st April 1926 and in his place Lieut.-Colonel J. Morison, I.M.S., was appointed acting Chairman under Government Resolution No. S.D.—731 of 5th May 1926. In November 1926 Lieut.-Colonel F. P. Mackie, on his return from leave, again resumed his office as permanent Chairman.

3. The Committee passed the following resolution on the resignation of Lieut.-Colonel W. M. Houston :—

> "The Committee place on record the valuable services rendered by Lieut.-Colonel W. M. Houston, M.B., Ch.B., D.P.H., I.M.S., as Chairman from 22nd April 1926 and that his experience has been of great help to the Committee."

Lieut.-Colonel T. MacCombie Young, M.D., D.P.H., I.M.S., acting Port Health Officer, was appointed a member of this Committee in place of Lieut.-Colonel W. M. Houston, on leave.

4. Dr. J. S. Nerurker, B.Sc., L.M. & S., D.P.H., Deputy Executive Health Officer, was appointed a member of the Committee under Government Resolution No. S.D.—534 of 29th March 1926.

5. The Committee gave permission to Captain B. S. Chalam to publish his book "Mosquito Reduction and Malaria Prevention" to which Lieut.-Colonel S. R. Christophers, C.I.E., O.B.E., I.M.S., wrote a foreword. The book is very useful for Sanitary Inspectors.

6. Captain B. S. Chalam, the Medical and Sanitary Officer, was on two months' leave in April and May 1926 and in his place Mr. K. H. Khabaria, Sub-Assistant Surgeon at Marine Lines, acted for him in addition to his own duties.

7. Government under their Memorandum No. B.—1/7-S.D. of 20th April 1926 sanctioned a grant of Rs. 350 for contingent expenditure of the Committee for the official year 1926-27, the actual expenditure during the preceding two years being Rs. 279 and Rs. 315 in 1924-25 and 1925-26, respectively.

8. During the absence of Dr. K. B. Shroff, L.M. & S., D.P.H., D.T.M., the Honorary Secretary, on six months' leave to England, Dr. Sorab C. Hormusjee, M.D., D.P.H., ably conducted his duties.

9. The General Officer, Commanding Bombay District, complained to Government in August 1926 concerning the Cooly Camp in the Old Lunatic Asylum grounds that the proximity of the Camp to the Officers' quarters was not only a serious menace to the health of the Officers of the Bombay garrison but was also a public nuisance, and requested Government for the immediate removal of this Camp to another suitable site.

The correspondence was sent to this Committee for their opinion and remarks, when after a long correspondence frequent visits and after hearing fully the views of Colonel R. H. Lloyd, V.H.S., A.D.M.S., Bombay District, and Major E. F. W. Mackenzie, O.B.E., R.A.M.C., the military member of the Committee, who both complained of fearful overcrowding in the Camp and the serious nuisance created by the children and labourers near the quarters of the Officers, passed the following resolution in February 1927 :—

> " The Committee is of opinion that the presence of the Cooly Camp in close proximity to British troops is objectionable and is a danger to public health and that it should be removed."

10. At the request of the Chief Medical Officer, B. B. & C. I. Railway, Captain B. S. Chalam was permitted " to inspect the railway area from Colaba to Santa Cruz and advise as to the staff and methods provided the additional work was carried out without detriment to his own legitimate duties." The work was done by Captain Chalam in one month and a very instructive report was submitted by him. The Committee recommended an honorarium of Rs. 750 to be paid to him, for this additional work.

11. Government under their No. S.B.—236 of 5th February 1927, asked for a report from Captain B. S. Chalam through the Committee regarding sanitary conditions in block 6 if left unreclaimed. The Committee, after personal inspection and full discussion, passed the following resolution:—

> (1) " The Committee considers that the danger to public health will be accentuated if the conditions are allowed to remain as they are at present and if reclamation is allowed to terminate at block 7."
>
> (2) " The Committee is of opinion that no further action need be taken at present in blocks 3 and 4, but as regards block 6 it considers that the conditions as they are constitute a danger to public health."

(3) "The Committee considers that the present conditions in block 5 are a potential danger to public health and that the area at present occupied by rocks and mangrove bushes should be entirely filled in. This area is roughly included by a curved line approximately following the fishermen's bund, that is the area as far as the low neap tide limit. At the southern end of the block this is the 300 yard limit."

(4) "The danger to public health referred to is mainly concerned with the breeding of mosquitoes and the occurrence of malaria."

12. The medical, sanitary and anti-malarial operations connected with the reclamation scheme were in charge of Captain. B. S. Chalam who performed his duties to the entire satisfaction of the Committee.

13. The labour connected with the scheme was housed in three separate camps situated one in Charni Road, and two in Colaba. The average total strength was approximately 1,700.

14. There were no special prevailing diseases in these camps. There were 16 deaths amongst the inmates of the Camps from general diseases, seven being from pneumonia.

15. The anti-malarial operations consisted of regular inspection and treatment of all actual and likely breeding places of mosquitoes. Weekly house to house inspection was made in the Colaba area to investigate into the prevalence of mosquitoes, both by the military and the reclamation staff; at every such inspection a questionnaire card was presented to the occupants of the houses where they were requested to state if they were troubled with mosquitoes. A catch of adult mosquitoes was carried out from time to time both in the reclamation camp and the British troops barracks at Colaba. Very few adult mosquitoes were caught during these inspections.

16. During the rainy season a few larvæ of anopheles mosquitoes were detected here and there in the reclaimed areas but they were not allowed to reach the pupal stage and the areas were treated frequently with larvacide.

17. The following table shows the ratio of admissions per 1,000 of strength for malaria amongst the British troops in the British Military Hospital, Colaba, in Bombay :—

Before the commencement of reclamation anti-malarial operations.		After the commencement of reclamation anti-malarial operations	
Year	Ratio	Year	Ratio
1921	972·46	1923	152·53
1922	387·14	1924	238·27
		1925	165·05
		1926	180·48

18. The spleen and parasite rate of the inmates of the Colaba reclamation camp in June 1926 was as under :—

Spleen rate.—Out of 100 persons examined only in one case the spleen was found enlarged upto one finger breadth.

Parasite rate.—Out of 100 children examined parasites were found in five only, giving a percentage of five.

19. The anti-malarial staff consisted of one Medical and Sanitary Officer, one Malaria Inspector, and coolies varying from 10 to 20 in number as circumstances demanded.

20. The sanitary staff consisted of two sanitary inspectors and 30 sweepers.

21. The medical staff consisted of two sub-assistant surgeons, two compounders and three dispensary servants.

22. *Cost of operations :—*

	Rs.
Medical and Sanitary Officer	9,600
House and car allowance	4,440
Total ..	14,040
Sanitary	13,410
Anti-malarial	9,300
Medical	5,020

23. Captain Chalam's report on the medical and sanitary transactions for the year is enclosed herein.

24. The Committee again cordially acknowledge the valuable services rendered by Dr. K. B. Shroff, L.M. & S., D.P.H., D.T.M., as Honorary Secretary since its inception four years ago and desire that they may be brought to the notice of Government.

K. B. SHROFF,
L.M. & S., D.P.H., D.T.M.,
Honorary Secretary,
Sanitary Committee,
Development Department.

F. P. MACKIE,
Lieut.-Colonel, I.M.S.,
Chairman, Sanitary Committee,
Development Department.

Annual report of medical and sanitary transactions for the year ending December 1926

The medical, sanitary and anti-malarial operations connected with the reclamation scheme were in my charge during the year under report. The labour connected with the scheme is housed in three separate camps situated, one behind Charni Road Station and the two in Colaba. The superior and subordinate staff connected with the scheme, the labour engaged on the works and the crew on the dredgers, all these get free medical attention, and the average total strength of persons under these categories during the year under report was approximately 1,700.

Hospital accommodation.—An out-door dispensary is attached to each of the three reclamation camps. Indoor hospital accommodation is not provided but serious cases requiring prolonged treatment or major operations are sent to any of the local civil hospitals. The total number of cases sent to the civil hospitals from the Reclamation Camps during the year under report was 17. One bed, however, is kept equipped in these dispensaries to receive any serious case and keep till such time as arrangements can be made to send it to a civil hospital.

The total number of out-patients during the year was as follows :—

New cases only	6,343
Old and new cases	20,461

The number of minor surgical operations performed during the year was 214.

The total number of persons vaccinated during the year was 1,283.

Some of the superior staff had T. A. B. and cholera vaccines.

Prevailing diseases.—A very large majority of the cases attending the dispensaries consists of minor injuries which is to be expected from the nature of the work they are engaged in ; otherwise there was no special prevailing disease.

Epidemics.—There was no epidemic of any disease in any of the camps during the year under report.

Deaths.—The total number of deaths in the camps during the year under report was 16.

Abscess liver	1
Ascites	1
Asthama	2
Dysentery	1
Pneumonia	7
Rickets	1
Still born child	1
T. B. lungs	2
Total ..	16

Isolation camps.—There is no isolation camp at present. Its necessity might be considered by the Sanitary Committee.

Sanitation.—One day every week is set apart in each camp when every room is emptied, bedding boxes, etc., are brought out and a disinfectant is sprayed all over.

Rat destruction is carried out throughout the year by setting traps in the camps and thus a good number of rats is accounted for.

Bazars in the Camps are under strict supervision and all eatables such as sweets, cakes, etc., are required to be kept in glass cases.

Dust bins with well fitting lids are put on raised cement platforms in sufficient numbers for each row of chawls to prevent accumulation of rubbish in and about the rooms. All latrines are of the flushing type. Separate latrines and bathing places are provided for men and women.

Staff and Cost of Operations.

The staff consisted of the following :—

Medical and Sanitary Officer	..	One.
Sub-Assistant Surgeons	..	Two.
Sanitary Inspector ..	..	One.
Malarial Inspector ..	..	One.
Sanitary Sub-Inspector	..	One.
Compounders ..	..	Two.
Dispensary servants	..	Three.
Sweepers ..	about	Thirty.
Anti-malarial coolies	about	Ten.

Cost of Operations.

Allocation	Estimated expenditure	Actual Expenditure
	Rs.	Rs.
Sanitary	13,410	about 13,410
Anti-malarial	16,550	,, 9,300
Medical	5,020	,, 5,020

Medical and Sanitary Officer.

Grade Rs. 650—50—900

	Per mensem. Rs.
Drawing now	600
House rent	220
Car allowance	130

	Per mensem. Rs. a. p.
Sub-Assistant Surgeon	172 0 0
Sanitary Inspector	247 8 0
Malarial Inspector	95 0 0
Compounder	50 0 0
Sanitary Sub-Inspector.	140 0 0

Members of the Sanitary Committee, Development Department, for 1926-27

1. Lieut.-Colonel F. P. Mackie, O.B.E., M.D., M.Sc., F.R.C.P., F.R.C.S., I.M.S., Director, Haffkine Institute, Chairman.
2. Lieut.-Colonel T. MacCombie Young, M.D., D.P.H., I.M.S.
3. Dr. J. E. Sandilands, M.C., M.D., D.P.H., Executive Health Officer, Bombay Municipality.
4. Captain E. F. W. Mackenzie, O.B.E., M.C., R.A.M.C.
5. Khan Bahadur Dr. N. H. Choksey, C.I.E., M.D.
6. Dr. H. M. Masina, L.M. & S., F.R.C.S.
7. Lieut.-Colonel R. Row, O.B.E., M.D.
8. Dr. P. A. Dalal, L.M. & S., D.T.M. & H.
9. Dr. Sorab C. Hormusjee, M.D., D.P.H.
10. Dr. K. B. Shroff, L.M. & S., D.P.H., D.T.M.
11. Dr. J. S. Nerurker, B.Sc., L.M. & S., D.P.H. (Cantab.), Deputy Executive Health Officer, Bombay Municipality, in charge of the Municipal Anti-malarial Operations.

PART II

INDUSTRIAL HOUSING SCHEME

No. L.M. 13/(S.D.)

OFFICE OF THE LAND MANAGER,
DEVELOPMENT DEPARTMENT :

Old Custom House Yard, Fort, Bombay,
dated the 9th August 1927

From

R. D. BELL, Esq., C.I.E., I.C.S.,
Land Manager,
Development Department ;

To

THE SECRETARY TO THE GOVERNMENT OF BOMBAY,
Development Department.

Subject.—Annual report on the administration of the Industrial Housing Scheme for the year 1926-27

Sir,

I have the honour to submit the annual report on the administration of the Industrial Housing Scheme for the year ending 31st March 1927. The scheme comprises 207 chawls of 80 rooms each (with one exception of 64 rooms) in four different areas, *viz.* :—

TABLE I

Chawl areas

	Chawls	Rooms
DeLisle Road	32	2,560
Naigaum	42	3,344
Worli	121	9,680
Sewri	12	960
Total ..	207	16,544

Chawls in use

2. During the preceding year 1925-26 all the 207 chawls had been completed in all respects, including water-supply, sewerage, storm-water drainage and lighting. All the chawls are, however, not yet in actual use owing to lack of tenants. During the year, twenty-five new chawls were thrown open for occupation by the working classes. The figures of occupied chawls in each area at the beginning and end of the year are as follows :—

TABLE II

Chawls in use

Locality	April 1926	March 1927
Naigaum	23	24
DeLisle Road	26	28
Worli	11	29
Sewri	7	11
Total ..	67	92

At Worli five of the chawls newly opened were let *en bloc* to the B. B. & C. I. Railway for housing the employees of the loco-shops at Parel.

The progress in opening new chawls has been maintained since the close of the year especially at Worli. In this area construction work was in progress till March 1925 and tenants had necessarily to undergo inconvenience while work was in progress. With the cessation of constructional operations, the popularity of the Worli area rapidly increased and the low scale of rents has now established it as the most popular area.

Scale of rents

3. The scale of monthly rents per room at the beginning of the year was as follows :—

TABLE III

Scale of rents in April 1926

	DeLisle Road	Naigaum	Sewri	Worli
	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Ground floor rooms ..	9 8	8 8	8 8	6 8
First floor rooms ..	10 0	9 0	8 8	7 0
Second floor rooms ..	10 8	9 8	8 8	7 8
Third floor rooms ..	10 8	9 8	8 8	7 8

This scale was based on the consideration that the upper floors were the airiest and healthiest. Owing to inadequate pressure in the mains, the water-supply to the upper floors was, however, often precarious and when, in order to attract more tenants, it was decided to reduce rents in July 1926, a flat rate for all floors was introduced as follows :—

	Rs. a. p.	
DeLisle Road	9 8 0	per room.
Naigaum	8 8 0	"
Sewri	8 8 0	"
Worli	6 8 0	"

In the following month rents were reduced to Rs. 6 per room at Worli, while a special reduction of 8 annas was made for top floors in all areas. In October rents at Sewri were further reduced by Re. 1-8-0 per room on all floors. The scale of rents from 1st October 1926 to the close of the year was, therefore, as follows :—

TABLE IV

Scale of rents in March 1927

——	DeLisle Road	Naigaum	Sewri	Worli
	Rs. a.	Rs. a.	Rs. a.	Rs. a.
First 3 floor rooms ..	9 8	8 8	7 0	6 0
Top floor rooms ..	9 0	8 0	6 8	5 8

At the close of the year, on 1st April 1927, rents were further reduced at Naigaum to Rs. 7 for rooms on all floors and at Worli to Rs. 5 for rooms on all floors. As these reductions have had a marked effect in increasing tenancies, the information in the following paragraph will be out of date by the time it is published. Arrangements will, therefore, be made to publish contemporaneously with this report up-to-date information regarding the increase in tenancies since 1st April 1927 (see appendix).

Tenancies

4. The following statement shows the number of rooms actually occupied during the last week of each month during the year.

TABLE V

Numbers of occupied rooms

Chawl centre	No. of rooms		No. of occupied rooms (including shops) month by month				
			1926				
	Constructed	Occupied on 31st March 1926	April	May	June	July	August
Naigaum ..	3,344	1,170	1,184	1,238	1,282	1,368	1,454
DeLisle Road ..	2,560	1,360	1,409	1,457	1,540	1,622	1,744
Worli	9,660	509	578	748	852	974	1,131
Sewri	960	357	418	418	495	489	513
Total ..	16,524	3,396	3,589	3,861	4,169	4,453	4,842

Chawl centre	No. of occupied rooms (including shops) month by month—*contd.*							Increase during the year
	1926				1927			
	September	October	November	December	January	February	March	
Naigaum ..	1,475	1,480	1,450	1,449	1,503	1,511	1,504	334
DeLisle Road ..	1,786	1,773	1,773	1,781	1,819	1,865	1,855	495
Worli	1,281	1,295	1,236	1,233	1,552	1,793	1,840	1,331
Sewri	518	605	645	725	769	785	766	409
Total ..	5,060	5,153	5,104	5,188	5,643	5,954	5,965	2,569

The statement shows that there has been an increase in the number of occupied rooms in all areas but specially at Worli.

In considering these figures, the effect of the mill-strike of September-December 1925 has to be borne in mind. When that strike began, there were close on 4,000 tenants in the chawls. During the strike, 1,200 tenants went to their homes, leaving unpaid at least the rents of the month in which they left and of the preceding month. For this reason, they did not return when the strike terminated. Mill hands, who

had remained in Bombay throughout the strike, but could not pay their rents, tended to abscond afterwards in order to avoid payment of their arrears. By April 1926, 700 rooms vacated during the strike, nearly all at DeLisle Road, had not been retenanted and this area was reoccupied very slowly. In these circumstances, Government reduced rents in July, August and October as mentioned in the preceding paragraph. The results at Naigaum and DeLisle Road were disappointing but the response to lower rents at Worli was very satisfactory. At the end of the year, the position was that at Naigaum over 1,800 tenements, or more than half the total number in this area, were vacant, while the number of tenants was stationary. At DeLisle Road, there were 700 vacant rooms but tenants were increasing. At Worli, tenancies had increased satisfactorily but the large number of vacant rooms, *viz.*, 7,700 or 80 per cent. of the whole number was a matter for serious concern. At Sewri, the chawls were being rapidly filled. In these circumstances, rents were again reduced after the close of the year under report at Naigaum and Worli and the effect on tenancies will, as mentioned already, be published in an appendix to this report. The financial effects of the reduction of rents combined with increased tenancies is discussed below (paragraph 10).

Two and three-roomed tenements

5. On account of the large number of vacant tenements, a chawl at Naigaum and another at DeLisle Road were converted into two and three-roomed tenements, with separate water taps for the accommodation of better paid workmen. The results indicate the caution with which experiments of this kind require to be made. The chawl at Naigaum appeared likely at first to be popular but it later became evident that there was no demand for the three-roomed tenements. The chawl is now let as two-roomed tenements with the odd rooms let singly. At DeLisle Road the converted chawl lay vacant for several months and so far is not well let.

Shops

6. At DeLisle Road there are only eight shops and all are let. In other areas the number of occupied and vacant shops is as follows :—

TABLE VI

Shops

Locality	Total number of shops			
	Occupied on 31st March 1927		Vacant on 31st March 1927	
	Double	Single	Double	Single
Naigaum 'B'	2	8	8	36
Worli	7	29	16	109
Sewri	2	16	3	14

Shops at Worli are likely to be let as tenants increase but at Naigaum the demand is poor.

Market at Worli

7. The ground floor of a chawl at Worli has been converted into a market as an experimental measure, but, owing to delay in the issue of a municipal license, could not be opened till the 1st of April 1927. Its operations, therefore, do not properly fall within the scope of the present report. About one-fourth of the stalls have been let.

Rent collections

8. The following table gives an idea of the efficiency, with which rents have been recovered month by month during the year.

TABLE VII

Rent collections

Month	Assessment of occupied rooms	Collections	Percentage of recovery
	Rs.	Rs.	
April 1926	34,206	31,025	91
May 1926	36,154	33,371	92
June 1926	38,744	34,034	88
July 1926	39,474	40,138	102
August 1926	41,721	37,203	90
September 1926	43,457	38,798	89
October 1926	44,004	67,790	154
November 1926	43,476	42,868	99
December 1926	44,060	40,280	91
January 1927	44,951	42,660	95
February 1927	44,829	41,265	93
March 1927	47,026	44,854	96
Total ..	5,04,102	4,94,286	98
1925-26	4,15,598	3,46,636	84
1924-25	4,70,417	3,74,561	79
1923-24 .. .	2,64,448	2,06,514	78

The rent of a room for any month is nominally due for payment on the 5th of the month, that is, in advance. Payment of rent in advance is very unpopular, the common practice among all classes in Bombay being to pay rent for any month in the following month. During the year under report, there has been a great improvement in the punctuality with which chawl tenants pay their rents and more than half of them now pay the rent for the month before its expiry. The collections for any month in the table above, say for March 1926, are, therefore, roughly half on account of rents for the month of March and half on account of the preceding month of February.

The high percentage of recovery in October was due to the payment in one sum of the rent amounting to Rs. 29,760 for the whole year on account of two chawls at DeLisle Road leased to the Police Department for housing policemen. The fall in collections in the month of September was due to the important Hindu festivals occurring in that month.

9. The recoveries of rent amounted to 98 per cent. of the current demand and showed a great improvement on previous years. The year under report was indeed the first normal year, of which the rent collectors had experience. In 1923-24 and 1924-25 rents were high, and the provisions of the Rent Act tended to encourage recalcitrancy and, during the mill strike of February-March 1924 the example for non-payment of rents was set. In the following year an effort, successfully begun, to reorganise the arrangements for rent collection, was frustrated by the prolonged mill strike of September-December 1925. By the beginning of the year under report, the worst effects of the Rent Act had worn off, the chawls had been purged of the worst tenants, there were no strikes and rents had been reduced. These circumstances facilitated the tuning up of the rent collecting machinery and the final results for the whole year may be considered very satisfactory.

10. In June 1926, before the reduction of rents the monthly rent roll was Rs. 38,744. In March 1927 (*i.e.*, after the rent reductions of July, August and October 1926) it had increased to Rs. 47,026, an increase of Rs. 8,282. The additional monthly expenditure involved in opening 20 new chawls in the same period was approximately Rs. 3,000. The policy of rent reductions has, therefore, been justified by the financial results.

Abscondency

11. The arrears left by absconding tenants are an indication of the extent to which bad debts accrued during the year. The following statement shows the number of absconders and the amounts due by them, month by month in each case :—

TABLE VIII

Statement of abscondency

Locality	1926							
	April		May		June		July	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
		Rs. a.		Rs. a.		Rs. a.		Rs. a.
Naigaum ..	35	798 12	40	938 0	35	700 4	35	606 4
DeLisle Road ..	28	1,104 4	25	879 12	12	397 4	13	424 12
Worli	19	435 0	7	120 0	18	333 0	14	253 12
Sewri	7	59 8	18	141 4	13	142 4	7	70 0
Total ..	89	2,397 8	90	2,079 0	78	1,572 12	69	1,354 12

Locality	1926							
	August		September		October		November	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
		Rs. a. p.		Rs. a.		Rs. a.		Rs. a.
Naigaum ..	24	352 0 0	18	288 8	38	498 8	56	888 12
DeLisle Road ..	12	428 5 6	19	557 4	28	726 0	24	667 12
Worli	26	268 8 0	16	184 0	111	1,177 4	99	765 4
Sewri	11	160 12 0	7	80 0	5	50 8	8	59 0
Total ..	73	1,209 9 6	60	1,109 12	182	2,452 4	187	2,380 12

Locality	1926		1927					
	December		January		February		March	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
		Rs. a.		Rs. a.		Rs. a.		Rs. a.
Naigaum ..	37	416 8	19	239 8	26	429 12	29	341 8
DeLisle Road ..	31	939 8	16	463 2	26	774 0	26	1,027 12
Worli	50	410 12	31	296 4	25	197 12	23	316 0
Sewri	12	119 8	12	101 4	3	62 4	12	138 8
Total ..	130	1,886 4	78	1,100 2	80	1,463 12	90	1,823 12

The total arrears due from the absconders shown in the table above was Rs. 20,830 as compared with Rs. 70,238 in the previous year. Every effort is made to track absconders to recover the arrears due by them. During the year under report, Rs. 3,971 was recovered by the staff from absconders who had been traced. The net loss from abscondency during the year was, therefore, Rs. 16,859, equivalent to 3·3 per cent. on the assessment of the year. This is a satisfactory result.

12. Some features of the absconding table require comment. The average arrears due per absconder fell from Rs. 24 in the first three months of the year to Rs. 17 in the last three months. The higher average in the early part of the year is due to tenants who had accumulated arrears during the strike of 1925 absconding afterwards to evade payment. DeLisle Road has a bad record as regards the amount of arrears due, on the average, by each absconder. This is, of course, partly due to the higher scale of rents in this area but also to the fact that it is the most difficult area to manage and seems to attract a larger proportion of bad tenants. While chawls are in process of filling, a stream of bad tenants, that is, bad from the rent collector's point of view, passes through them, and the DeLisle Road area has suffered most in this matter. The collection of rents is, however, steadily, if slowly, improving even here.

Another feature of the table is the increase in absconders in October, November and December 1926, especially at Worli. This is attributed in great part to an outbreak of malaria, which was general, but it is probable that many of the poorest classes occupy a room at Worli only for the rains and then make their escape.

Writes off

13. It will be gathered that, during the years 1923-24, 1924-25 and 1925-26, there was a great accumulation of arrears of rent due partly to recalcitrancy arising out of the effects of the Rent Act, partly to two mill strikes and partly to other causes. These arrears were borne on the rent registers long after the parties owing them had disappeared. The writing off of these arrears was undertaken in the previous year and during the year under report a total sum of Rs. 1,91,343 was written off as irrecoverable. There is still a small amount of old irrecoverable arrears to be dealt with. Recent arrears are written off methodically, all the arrears left by absconders who have not been traced being written off six months after their disappearance.

Establishment charges

14. The establishment charges for the year, including the staff for management, rent collection, court work and sanitation, amounted to Rs. 57,500, approximately, or 11 per cent. of the assessment of Rs. 5,04,000. The figure last year was 12·4 per cent. As the chawls are filled, the percentage tends, of course, to diminish.

A rent collector can manage about 1,000 occupied rooms. A court clerk and two "trackers" deal with absconders. Resort to the court is necessary in the case of tenants who refuse both to pay rent and to vacate their rooms. Two years ago there were hundreds of court cases; nowadays there are very few. This illustrates the different "atmosphere," in which the rent collectors now work. They collect more rents and have a much less worrying time than formerly.

The sanitary staff comprises one sweeper to each chawl, a mukadam in charge of 20 chawls and two sanitary inspectors for purposes of supervision.

Repairs and maintenance

15. The cost of repairs and ordinary maintenance during the year was Rs. 73,500. Municipal taxes amounted to Rs. 3,00,100. This amount included considerable arrears.

Accounts

16. The accounts of the year are not yet complete, as questions regarding allocations between the capital and revenue accounts are under discussion with the Audit and Accounts Officer, Bombay Development Scheme. The accounts will be published later as part of the capital and revenue accounts of the Development Department. In future years it should be possible to publish at least the provisional accounts of the previous year along with the annual report.

Amenities

17. Schools are established at Naigaum, DeLisle Road and Worli. The Infants' Welfare Society do excellent work in each of these areas.

Vital Statistics and Sanitation

18. TABLE IX

Locality	Population (approximately)	Deaths	Death rate per 1,000 (approximately)
Naigaum	7,045	223	31·6
DeLisle Road	8,510	241	28·3
Worli	6,090	163	26·7
Sewri	2,995	58	19·3
Total ..	24,640	685	27·8

The population figures in column 2 are the average of the monthly tenancies (table V) multiplied by 5, that is to say, the death rate is calculated on the assumption that there is an average of five inhabitants per room.

19. During the year the sanitation of all chawl areas was satisfactory and the grosser forms of insanitation and uncleanliness, which characterised some of the earliest occupants of the chawls, have been practically eradicated. Most chawls are now very well kept by the tenants and, if all the circumstances are taken into consideration, the general cleanliness and the work of the staff of sweepers are satisfactory. One great disadvantage is the lack of proper storage for *kachra* till it is removed in municipal carts. The open carts provided by the Municipality are soon filled to overflowing and, in any event, are accessible to all the animals—donkeys, goats, dogs, cats and fowls—of the neighbourhood, which feed on the garbage.

There were a few cases of small-pox and cholera; these were immediately removed for treatment to the municipal hospital and the rooms were disinfected.

General remarks

20. There has been a satisfactory increase in tenancies during the year coupled with a notable improvement in rent collections. The Worli area has become distinctly popular. The Industrial Housing Scheme seems to have turned the corner. To this result Mr. R. Hogan, the Assistant Land Manager-in-charge of the chawls, has contributed by his careful and tactful management both of staff and tenants. The care of the buildings has been in the capable charge of Rao Saheb K. C. Advani, Executive Engineer, Suburban Division. I have to acknowledge the good services of both these officers.

I have the honour to be,

Sir,

Your most obedient servant,

R. D. BELL,
Land Manager, Development Department.

APPENDIX

The following table shows the increase of tenants in all chawl areas since 1st April 1927 (see paragraphs 3 and 4 of report):—

Locality	Rooms occupied		Increase
	Last week of March	Week ending 10th Sept. 1927	
Naigaum	1,504	2,288	784
DeLisle Road	1,855	1,999	144
Worli	1,840	2,987	1,147
Sewri	766	841	75
Total ..	5,965	8,115	2,150

PART III

BOMBAY SUBURBAN SCHEMES

No. A.D.M.—63

OLD CUSTOM HOUSE YARD, FORT, BOMBAY :

Dated the 8th August 1927.

From

R. D. BELL, ESQUIRE, C.I.E., I.C.S.,

Commissioner, Bombay Suburban Division;

To,

THE SECRETARY TO GOVERNMENT,

Development Department, Bombay.

Subject.—Annual report on the working of the Development Department for the year 1926-27.

Sir,

I have the honour to submit the annual report on the operations of the Development Department in the Bombay Suburban Division during the year ending 31st March 1927.

I. Suburban Schemes of the Development Department.

A total area of 42,700 square yards valued at Rs. 2,37,880 and distributed over the various schemes as shown below was disposed of during the year :—

TABLE I

Scheme No.	Disposed of during 1926-27		Total disposed of upto 31st March 1927	
	Sqr. Yds.	Valuation	Area	Value
		Rs.		Rs.
III Chembur	8,796	26,249	140,853	3,21,966
VI Danda	1,270	10,295	19,770·66	1,46,493
VII Khar Model Suburb ..	30,655·2	1,90,695	204,670·20	11,89,133
VIII Chapel Road, Bandra ..	1,409	7,561	99,617·50	4,10,035
XVIII Kirol North ..	560	3,080	22,878	1,12,653
Total ..	42,690·2	2,37,880	487,789·36	21,80,280

The state of sales compared with those of the previous two years is exhibited in the following table :—

Statement showing disposal of land in suburban schemes

TABLE II

Scheme No.		Valuation of land disposed of		
		1924-25	1925-26	1926-27
		Rs.	Rs.	Rs.
III Chembur	Sales ..	2,412	6,063	3,249
	Settlements ..	16,218	1,85,525	23,000
VI Danda	Sales ..	31,341	45,151	10,295
	Settlements ..	1,738	57,969	..
VII Khar Model Suburb ..	Sales ..	1,83,446	3,15,262	1,90,695
	Settlements ..	11,150	5,247	..
VIII Chapel Road, Bandra ..	Sales ..	19,057	23,603	7,323
	Settlements ..	..	1,939	238
XVIII Kirol North ..	Sales ..	5,300	..	3,080
	Settlements ..	..	1,04,273	..

The actual receipts from the sales of land and settlements in the various schemes was as shown below :—

TABLE III

Scheme No.	1924-25	1925-26	1926-27
	Rs.	Rs.	Rs.
S. S. I	9,633	....	....
S. S. III	53,250	35,041	11,164
S. S. VI	37,348	36,626	32,326
S. S. VII	1,77,203	2,88,803	1,64,572
S. S. VIII	53,841	28,092	4,425
S. S. XV	23,031	49,582	9,826
S. S. XVIII	3,900	2,970	110

The state-aided building scheme continued to encourage the purchase of plots in Suburban Scheme No. VII—Khar. The sub-joined table shows the comparative figures for the last three years :—

TABLE IV

Year	Number of persons who were granted advances	Total amount advanced on land and buildings
		Rs.
1924-25 ..	19	1,43,082
1925-26 ..	33	2,85,215
1926-27 ..	34	2,25,137

The electrification of the B. B. & C. I. Railway, which it is expected will be completed by the end of 1927, will add to the popularity of the seaside Suburban Schemes.

The denotification of land referred to in paragraph 30 of the last year's report was continued during the year, the total area released from the beginning up to the close of the year being 8,235 acres. Additional areas will be denotified during 1927-28.

2. The suburban schemes of the Development Department are reviewed in detail below.

The capital and revenue accounts are separately prepared by the Audit and Accounts Officer and those for 1926-27 are not yet ready. The financial position of the various schemes is therefore not examined in this report; they will be investigated shortly by the reconstituted Special Advisory Committee which has already reported on the Back Bay Reclamation Scheme, the Bombay City Schemes, and the Industrial Housing Scheme in Bombay City.

3. The following schemes were either never started or have been closed with little or no expenditure :—

No. 4.—Trombay West.
No. 5.—Malavani.
No. 9.—Murzabanabad.
No. 11.—Rann of Juhu.
No. 14.—Mogra.
No. 20.—Khopoli.

All work on the following two schemes has been stopped and is not likely to be resumed in the near future.

No. 12.—Suburban Trunk Roads.

No. 13.—Salsette Drainage.

Residential Schemes

Suburban Scheme No. 3—(Trombay North-West).—The area of 70,643 square yards mentioned in last year's report as purchased by the St. Anthony's Homes Co-operative Society was developed during the year by the construction of four roads 30′ wide and the provision of water pipes along them. The whole work costing about Rs. 34,000 has been completed since the close of the year under report. The Society has also purchased the building formerly occupied by the Executive Engineer's Office for the purpose of a boys' school and is also making arrangements to start a separate girls' school.

Arrangements are under consideration for leasing the wharf at Pestom-sagar in front of the area originally intended for the lime burners of Kurla.

Suburban Scheme No. VI—(Danda).—A small length of about 250 feet of road in this scheme was taken in hand towards the close of the year and completed. Similarly, the extension of the Turner Road upto

this scheme was completed at a cost of Rs. 19,056 and handed over to the Bandra Municipality. This extension is of very great service to the public in this area. Two bungalows have been built and two more are in course of construction.

Suburban Scheme No. 7—(Khar Model Suburb).—The greatest demand for land in the suburbs is in this scheme, which is divided into four sectors A, B, C and D. Sector A is the area between Khar Railway Station and the Bandra-Ghodbunder Road, while sectors B, C and D lie between the Ghodbunder Road and the sea. Sector A is the only area in which shops will be allowed. A proposal has been submitted to the Bandra Municipality for transferring the proposed market from the site originally chosen in sector A to one nearer the railway station and parallel to the railway line since it is apprehended that the construction of a market at the original site will cause inconvenient congestion in the locality. The extension of the 1st road to near Danda village and the construction of the 14th road have been completed and plots on both sides of the latter have been filled in and made available for sale.

The 1st road is the main road leading from Khar Railway Station to the sea front near Danda village. As regards its extension to the end of Danda village the Collector remarks as follows :—

> " It is true that the first road is constructed upto the boundary of the Khar Scheme at Danda end, but there is a gap between this end and the Carter Sea Face Road and the Danda Pali Road. The road at present is in the air. It must be joined upto either of these two roads mentioned above, if it is to be of real use to the owners of the buildings in the scheme."

The Collector has promised to submit further proposals in the matter which are awaited. A plot in this scheme was taken up during the year by Messrs. Killick Nixon and Company and Calender's Cable Construction Company for the purposes of an electric supply station. The supply of electric energy seems to be assured by May 1928 and should further increase the popularity of this scheme. The number of bungalows so far completed in the Khar Scheme is 115 while 27 are in course of construction. Pipe lines for water supply have been laid along the roads in sector B and also along a part of the 13th and whole of 14th Road.

Suburban Scheme No. 8—(Chapel Road, Bandra).—The old tank in this area has been filled in since the close of the year and now provides a recreation area for the residents in the scheme. This completes the works in the scheme. Thirty-six bungalows have, so far, been completed and one is in course of construction at the close of the year. Only 11 plots measuring about 8,000 square yards and valued at Rs. 49,000 remain for disposal. The rates for these have now been reduced in order to facilitate disposal and close the scheme account. Offers for some of them have been received and are under consideration.

Suburban Scheme No. 16—(Shahar).—The original Shahar Scheme has been abandoned and the lands denotified, except small areas at Andheri and Kole-Kalyan which were acquired partly in connection

with the Central Salsette Railway (Suburban Scheme No. XVII). Layout plans for these surplus lands have been prepared to facilitate disposal of the lands. The layout of Kole-Kalyan has been recently approved by Government.

Suburban Scheme No. 18—(Kirol North).—No new works were carried out and no sales were effected during the year.

Suburban Scheme No. 24—(Willingdon South).—This is a small scheme at the southern end of Santa Cruz. Practically all the land has already been taken up by the Catholic Co-operative Housing Society, Ltd., and the remaining area is under negotiation with the Society.

INDUSTRIAL SCHEMES

5. *Suburban Scheme No. I—(Kurla-Kirol).*—A small part of the area has been acquired by the G. I. P. Railway and a large additional area is now under their investigation.

Suburban Scheme No. II—(Trombay North-East).—This was undertaken to provide accommodation for the tanneries at Dharavi which were likely to be removed by the operations of the Bombay City Improvement Trust. As the Trust's Dharavi scheme is at a stand-still and likely to be in large part abandoned development operations in Trombay North-East have been stopped for a considerable time.

Suburban Scheme No. XV—(Ambernath).—There have been no developments in this area during the year under report but the report of the Indian Tariff Board on the Cotton Textile Industry has recently drawn attention to the advantages of the area for a large bleaching, dyeing and printing works.

WATER SUPPLY SCHEMES

6. *Suburban Scheme No. 19—(Salsette Water Supply).*—The sub-schemes under this scheme are :—

1. Andheri including Marol.
2. Vile Parle.
3. Santa Cruz and Juhu.
4. Khar.
5. Bandra.
6. Kurla.
7. Trombay.
8. Ghatkoper.

Considerable work was carried out under this scheme during the year. This consisted of :—

(1) A new water supply system in the whole of Vile Parle Town Planning Schemes Nos. 2 and 3,

(2) A new water supply system in the whole of Ghatkoper.

(3) Extension of pipes in sectors B and C of Khar,

(4) Extension of pipes for the St. Anthony's Homes area in Suburban Scheme No. 3 (Chembur), and

(5) Taking over from the Bombay Municipality the supply to the Kurla Municipality.

Proposals are in hand for the extension of water supply to Ambivli village and Versowa from the Andheri system and also along the first road in Khar. The sub-schemes Nos. 2 and 8 were under construction during the year under report. The figures of consumption, cost of maintenance, etc., in the remaining sub-schemes are given in Appendix " A ".

Suburban Scheme No. 21—(Ambernath Water Supply).—The whole of this water supply scheme is now worked by power supplied from Ambernath. The electric pump and motor necessary for this purpose were installed during the year and all necessary fittings on the pipe system and in the pump house were provided. The pump is capable of a supply of 15 lakhs gallons in a working day as against the actual demand of about 1¼ lakh gallons a day in the Ambernath area. The details of consumption, cost of maintenance, etc., for the two years under this scheme are as under (see also Appendix " A ") :—

TABLE V

	1925-26	1926-27
(*a*) Number of connections in the scheme.	18	21
	Gallons	Gallons
(*b*) Average daily consumption in the scheme.	105,000	120,000
	Rs.	Rs.
(*c*) Cost of maintenance, etc. ..	20,889	23,617
(*d*) Receipts from sale of water and rent for meters.	14,739	36,302

Requests for a supply have been received from the G. I. P. Railway, the Kalyan and Thana Municipalities and the inhabitants of the village of Badlapur. These are under consideration.

Rules for water supply in the Ambernath Area were framed on the basis of the Salsette Water Supply Rules with the necessary modifications and were approved and issued in pamphlet form by Government.

RAILWAY SCHEMES

7. *Suburban Scheme No. 17—(Central Salsette Railway).*—The overhead bridge at Kurla was completed by the G. I. P. Railway and the approaches to it by this department. The negotiations for the transfer of this railway to the G. I. P. Railway have been completed and sanctioned by the Government of India since the end of the year under report.

Suburban Scheme No. 22—(Kurla-Trombay Railway).—The Kurla-Trombay Railway along with all works done and land acquired, was handed over during the year to the G. I. P. Railway on the basis of

the agreement approved by Government. The G. I. P. Railway are now in charge of the whole of this line from Kurla Station to Mandala. They expect to lay and complete in a short time the permanent way up to Mandala.

Electric Supply

8. *Suburban Scheme No. 23—(Ambernath Electric Supply).*—The Badlapur sub-station was brought into regular service from June 1926 and all the remaining works were carried out during the year.

The total number of units sold during the year amounted to 404,962 of which 350,615 were for power and 54,347 for lighting. The working cost for units sold amounted to Rs. 27,447 and the revenue obtained was Rs. 43,199. The working cost and the revenue obtained during the year 1925-26 were Rs. 17,188 and Rs. 31,435 respectively.

Miscellaneous

9. *Suburban Scheme No. 10—Aerodrome at Gilbert Hill, Andheri.*—Recent developments in the organisation of civil aviation in India have brought the utilization of this site again under consideration and it is hoped that a decision will shortly be reached.

10. *Area under the control of the Collector.*—All acquired lands not required for purposes of immediate development are under the management of the Collector. At Ambernath, the area thus managed is about 1,200 acres and the revenue derived from it during the year was Rs. 7,326. A special Awal Karkun has been appointed during the current year for the more efficient management of this area as well as of the undeveloped acquired lands in other parts of this district and it is hoped that the income derived from these lands will tend to increase through his personal supervision. The area under the Collector's management in the other schemes is 1,077 acres and the income derived from leasing the lands for purposes of agriculture and temporary hutting was Rs. 17,068 during the year. As the slump in the land market still continues the prospect of selling land in these areas in the near future is not very hopeful.

General Remarks on Development Department Schemes

11. Activities in departmental schemes in suburban area were at a stand still during the year except for water supply schemes and such roads as it was necessary to construct to supply the demand for plots for residential purposes at Khar and Chembur.

II. Town Planning Schemes

12. These are an important feature in the development of Salsette for residential purposes. A complete list of those in existence is given in Appendix " B " showing for each scheme the approximate

area, the cost of works and the stage which it has reached. The work done during the year is reviewed below :—

(*a*) During the year three schemes were finally sanctioned by Government and published in book form, *viz.* :—

(1) Vile Parle Town Planning Scheme No. III.

(2) Vile Parle Town Planning Scheme No. IV and IV-A.

(3) Bandra Town Planning Scheme No. V.

These schemes will open up for residential purposes an area of about 2½ lakhs square yards of land belonging to 121 plot owners—

(*b*) Three schemes, *viz.*, Borivli Town Planning Scheme No. 2, Santa Cruz Town Planning Scheme No. 5, and Bandra Town Planning Scheme No. 3 have been kept pending as the owners desire their cancellation or modification.

(*c*) Ghatkoper Town Planning Scheme No. 2 final, and draft schemes Andheri Town Planning Scheme Nos. 5 and 6 and Bandra Town Planning Scheme No. 4 await the sanction of Government which is shortly expected.

(*d*) Vile Parle Town Planning Scheme No. 6 is before the Arbitrator while Juhu Town Planning Scheme No. 1 is being drafted.

13. The following is a summary of the works executed during the year in different town planning schemes.

Vile Parle

No. 2.—About three miles of roads with the necessary cross and storm water drains, which were put in hand during the previous year, were completed during the year and the roads opened to traffic at an actual cost of Rs. 1·82 lakhs.

No. 3.—Works in this scheme were commenced in February 1927 and have made good progress. The 7th road which was very urgently required by the contributors in the scheme was completed and opened for traffic. The total cost of the whole scheme is estimated at Rs. 1·26 lakhs.

Nos. 4 and 4-A.—The only work in the scheme, *viz.*, a main 30′ road, with cross drainage works discharging water from an area of about 28 acres was completed at an actual cost of Rs. 10,800 against the estimated cost of Rs. 12,627.

Malad

No. 1.—The remaining roads in the scheme were completed within the estimated cost of Rs. 32,000. As these roads are to be maintained by the Notified Area Committee that body has been asked to take them over as early as possible.

Santa Cruz

No. 2.—The side and cross drainage works in the scheme were all completed in the course of the year. The actual cost of the scheme is Rs. 2·75 lakhs against the estimated cost of Rs. 2·93 lakhs. The scheme is now ready to be handed over to the Notified Area Committee.

No. 4.—The work of the remaining roads and drains was started in February 1927 and the roads are now ready for traffic.

Ghatkopar

No. 1.—Works costing about Rs. 5,700 against the estimated cost of Rs. 33,000 were carried out during the year as orders to take in hand the remaining works were received late in the year. Most of the roads have, however, been completed since the close of the year and in due course will be handed over to the Municipality by whom they are to be maintained.

GENERAL REMARKS ON TOWN PLANNING SCHEMES

14. The Collector observes that the problem of unfinished town planning schemes is becoming increasingly difficult as, owing to depression in the land market, the owners are against the idea of completing the works in the scheme originally contemplated. They also plead their inability to pay the costs so far incurred on the schemes. He, therefore, suggests that such schemes should be completed on the basis of unmetalled access without providing for the cost of metalled roads or other works. The whole question is under the consideration of Government. On the other hand some of the Town Planning Schemes have been remarkably successful. The contrast in general amenities between the earlier developed portions of Santa Cruz and the areas of Town Planning Schemes Nos. 1, 3 and 4 is most striking. Vile Parle has developed to the East of the Railway line to an astonishing extent and, now that a water supply is available in the area between the Railway line and the Bandra-Ghodbunder Road, an equally rapid extension seems likely to the west of the railway. The new layouts at Vile Parla are, however, inferior to those at Santa Cruz partly owing to the greater handicap imposed by earlier building operations and partly because the roads are too restricted in width.

III. Bombay Suburban Survey

15. The field work was stopped on 8th July 1926 and was restarted on 1st October 1926. During the monsoon the surveyor was put on the work of checking the non-agricultural sanad plans of Bandra and Danda with Mr. Newland's 40 feet maps. No original detailed survey work or traverse survey work was done in the year under report.

Maintenance of 330′ maps

The checking of the 330′ scale maps of Bandra and Danda and of a portion of Vile Parle comprising sheet Nos. S.W.-3, 4, 5, 6 and 10 was taken in hand on 1st April 1926 and completed on 26th June 1926. The total area revised amounted to 2,752 acres or 4·3 square miles.

Maintenance of 40′ maps

The checking of the 40′ scale survey sheets of the Bandra area was commenced on 1st October 1926 and continued to the end of the year under report. The area includes two big schemes, *viz.*, the Chapel Road and Khar Schemes (Suburban Schemes Nos. VII and VIII). Very little detailed survey work had been done before in these schemes, as the buildings and new roads came into being after the area was originally

surveyed. By the time the revision work was commenced, the schemes were fully developed and much detailed survey work was required to be done. The total area revised amounted to 303 acres.

Fifty-eight unauthorised structures or huts were detected in 35 plots of the Chapel Road Scheme (Suburban Scheme No. VIII) while 10 cases were detected where there was a breach of the margin regulations. The total number of plots examined during the year in this scheme was 67.

Twenty-nine unauthorised structures were detected in 21 plots of Suburban Scheme No. VII, Khar Model Suburb, and 16 cases of marginal defects were noticed. The total number of plots checked in this scheme was 163.

Fifty-one Non-Agricultural plots of Bandra were checked in the office with the aid of the revised sheets and 46 unauthorised structures were detected in 26 non-agricultural plots. This work has been taken up recently with vigour and the surveyor and the draftsman have both been placed on it again during the current monsoon. The work done during the last monsoon was not very fruitful as many changes had taken place between the period of the original survey and the period of inspection in the field. The sanad plans are now checked from the revised sheets so as to avoid mistakes. In all cases of deviation from the sanctioned plans as well as also in the cases of unauthorised structures, the maintenance office sends a statement to the Salsette Development Officer for necessary action.

An amount of Rs. 968 was realised from the sale of printed maps and Rs. 330 from the sale of blue prints of the suburban survey sheets, which have not been printed. The total sale proceeds came to Rs. 1,298.

16. I desire to acknowledge the valuable services of Rao Saheb K. C. Advani, Executive Engineer, Suburban Division, under the superintendence of Mr. A. X. Moraes, Superintending Engineer, Northern Circle, in connection with the execution of works in departmental and town planning schemes and the administration of the water and electric supply schemes. Mr. K. R. Doctor, Personal Assistant to the Land Manager, has done good work in the disposal of lands and as arbitrator in town planning schemes. Mr. S. M. Bharucha, Collector, Bombay Suburban District, is concerned with all aspects of the work of the Development Department in his district. I am specially indebted to him for the care and sagacity with which all his duties have been performed. Lastly, I acknowledge the sound hard work of the Assistant Commissioner, Mr. H. St. C. Smith.

I have the honour to be,

Sir,

Your most obedient servant,

R. D. BELL,

Commissioner, Bombay Suburban Division.

APPENDIX "A"

Name of Scheme	Number of connections in the scheme on		Average daily consumption in the scheme during		Cost of maintenance including purchase of water from Bombay Municipality and cost of new meters supplied		Receipts from sale of water and rent for meters	
	31st March 1926	31st March 1927	1925-26	1926-27	1925-26	1926-27	1925-26	1926-27
2	3	4	5	6	7	8	9	10
S. S. 19	Nos.	Nos.	Gallons	Gallons	Rs.	Rs.	Rs.	Rs.
Andheri-Marol ..	245	275	78,700	109,400	16,656	24,594	20,474	36,432
Santa-Cruz Juhu	282	311	156,700 (includes Khar.)	152,700	21,854	30,000	55,652	49,261
Khar ..	72	124	Not known	25,800	..	2,500	954	7,107
Bandra ..	..	..	..	382,000	..	43,868	..	59,982
Kurla ..	..	..	..	627,000	..	56,056	..	78,076
Trombay ..	28	35	27,700	34,000	8,524	9,734	8,114	13,040
S. S. 21								
Ambernath ..	18	21	105,000	120,000	20,889	23,617	14,739	36,302 Arrears of receipt for 1925-26 were realised in 1926-27.

Remarks :—

Columns 7 and 8.—Cost of maintenance does not include interest charges on capital, depreciation and overhead establishment and general charges.

Columns 9 and 10.—Receipts do not include premium and connection fees which are credited to the capital account.

R. D. BELL,
Commissioner, Bombay Suburban Division.

APPENDIX "B"

List of town planning schemes in the Bombay Suburban Division

Locality and scheme	Approximate area in acres	Cost of works under section 3	Present state
Bandra		Rs.	
T. P. Scheme No. 1 ..	5·68	22,647	Complete.
Do. No. 2 ..	21·82	14,432	Do.
Do. No. 3 ..	170·53	8,43,000	Draft scheme sanctioned and scheme with Arbitrator.
Do. No. 4 ..	63·75	72,347	Draft scheme under preparation.
Do. No. 5 ..	1·08	*Nil* ..	Complete.

gitized with financial assistance from th
Government of Maharashtra
on 20 July, 2017

Locality and Scheme	Approximate area in acres	Cost of works under section 3	Present state
Santa Cruz		Rs.	
T. P. Scheme No. 1 ..	36·71	20,930	Complete.
Do. No. 2 ..	145·15	2,72,440	Do.
Do. No. 3 ..	46·81	1,48,335	Final scheme sanctioned.
Do. No. 4 ..	69·96	1,44,191	Final scheme sanctioned and works nearly completed.
Do. No. 5 ..	120·63	1,85,000	Draft scheme sanctioned and scheme with Arbitrator.
Juhu			
T. P. Scheme No. 1 ..	133·14	1,00,000	Draft scheme under preparation.
Vile Parle			
T. P. Scheme No. 1 ..	36·49	37,877	Complete.
Do. No. 2 ..	86·01	2,01,579	Do.
Do. No. 3 ..	56·70	1,26,457	Final scheme sanctioned and works in progress.
Do. Nos. 4 & 4A.	5·69	11,990	Complete.
Do. No. 5 ..	92·93	1,65,282	Draft scheme under preparation.
Do. No. 6 ..	38·21	64,342	Draft scheme sanctioned and scheme with Arbitrator.
Andheri			
T. P. Scheme No. 1 ..	10·39	1,787	Complete.
Do. No. 2 ..	52·64	32,530	Do.
Do. No. 5 ..	87·83 (Sector A)	2,39,412	Draft scheme under preparation.
Do. No. 6 ..	55·72	1,53,465	Do.
Malad			
T. P. Scheme No. 1 ..	44·73	24,111	Complete.
Borivli			
T. P. Scheme No. 1 ..	76·06	8,309	Complete.
Do. No. 2 ..	102·82	1,37,900	Draft scheme sanctioned and scheme with Arbitrator.
Ghatkoper			
T. P. Scheme No. 1 ..	14·55	37,723	Complete.
Do. No. 2 ..	43·45	1,77,787	Final scheme submitted for sanction.

R. D. BELL,
Commissioner, Bombay Suburban Division.

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